

REMARKS

Claims 1-7 are now pending in the application. Applicant has amended claims 1-6. The amendments to the claim contained herein are of equivalent scope as originally filed and, thus, are not a narrowing amendment. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 2, 4 and 7 stand rejected under 35 U.S.C. §102(e) as being anticipated by Ramaswami (U.S. Pat. No. 6,947,623). This rejection is respectfully traversed.

As shown in FIG. 9, Ramaswami at best describes a signal 635 sent to the optical switch core, and a signal 636 is sent to the redundant optical switch core. The optical switch core provides a primary optical path, and the redundant optical switch core provides a redundant optical path in the event that the optical switch core is not operating properly. As shown in FIG. 8, the processing unit 685 communicates with (2:1) optical switches of each data propagation circuit 600 employed in the I/O port module 215 in order to receive switch status signals and to provide switch control signals.

Applicant's invention differs from Ramaswami in:

1. FIG. 9 of Ramaswami at best discloses a hot backup mode to maintain the reliability of transmission, where both the optical switch core and the redundant optical switch core operate simultaneously. In the claimed invention, the protected device functions not as a backup device but as a transmission device.

Signals from the source-neighboring devices must be processed, in operations such as protocol conversion, routing and etc., by the protected device. Thus, the protected device cannot be analogized to redundant equipment of Ramaswami.

2. FIG. 9 of Ramaswami at best discloses that signal 635 is sent to the (2:1) optical switch in the I/O port via the optical switch core. In the claimed invention the second duplicated optical signal is sent directly to the optical-signal selecting unit.

3. Ramaswami also at best discusses that switch status signals and switch control signals are generated in the I/O port rather than in the redundant optical switch core. More specifically, switch status signals and switch control signals are generated at the destination receiving side. In the claimed invention, working status signals are generated by the protected device. Since the probability of a failure occurring in a protected device (intermediate communication device) is greater than in routes, it is preferable for the intermediate communication device to ensure its own operational availability. Frequently, packets are transmitted to a device even it is out of order. For instance, where the CPU or software of a protected device is abnormal or programs in the protected device enter into dead loops, packets are still transmitted to the destination device by the protected device. In this case, the failure occurring in the protected device is unable to be detected. With working status signals being generated by the protected device itself, abnormal software, abnormal traffic, abnormal function and the like, in addition to abnormal physical links, are detected. Moreover, where working status signals are generated by the destination receiving side as in

Ramaswami, working status of the protected device can not be monitored. Thus, it is important where working status signals are generated.

In view of the forgoing, Applicant respectfully submits that the art cited by the Examiner fails to anticipate claim 1 and respectfully requests withdrawal of the rejection. Likewise, claims 2-7, which depend from claim 1, also define over the art cited by the examiner.

ALLOWABLE SUBJECT MATTER

The Examiner states that claims 3, 5 and 6 would be allowable if rewritten in independent form. Applicant elects to defer rewriting claims 3, 5, and 6 until the Examiner has considered the amendments and arguments presented herein.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: October 20, 2006

By: /Joseph M. Lafata/
Joseph M. Lafata, Reg. No. 37,166

HARNES, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

JML/prd